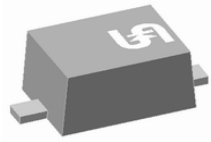


MMSZ5221B - MMSZ5263B

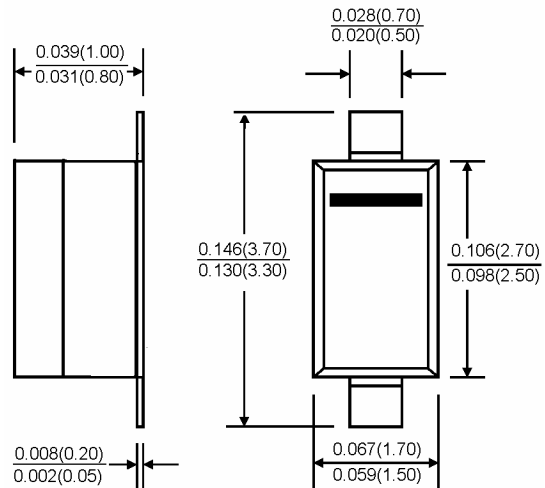
500mW Surface Mount Flat Lead
Zener Voltage

SOD-123F



Features

- ✧ Wide zener voltage range selection, 2.4V to 56V
- ✧ VZ tolerance selection of $\pm 5\%$
- ✧ Flat lead SOD-123 plastic package
- ✧ Surface device type mounting
- ✧ Moisture sensitivity level 1
- ✧ Clip bonding construction, good thermal capability
- ✧ RoHS compliant
- ✧ Matte Tin (Sn) lead finish
- ✧ Band indicates cathode



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P_d	500	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 150	°C

These ratings are limiting value above which the serviceability of the diode may be impaired

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ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Device (Note 1)	Device Marking Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance		Maximum Reverse				
		Vz @ IzT			IzT	ZzT @ IzT	ZzK @ IzK = 0.25mA	Leakage Current				
		Nom (V)	Min (V)	Max (V)				mA	Ohms	Ohms	IR @ VR	
											uA	Volts
MMSZ5221B	Z2V4	2.4	2.28	2.52	20	30	1200	100	1.0			
MMSZ5222B	Z2V5	2.5	2.38	2.63	20	30	1250	100	1.0			
MMSZ5223B	Z2V7	2.7	2.57	2.84	20	30	1300	75	1.0			
MMSZ5224B	Z2V8	2.8	2.66	2.94	20	30	1400	75	1.0			
MMSZ5225B	Z3V0	3.0	2.85	3.15	20	30	1600	50	1.0			
MMSZ5226B	Z3V3	3.3	3.14	3.47	20	28	1600	25	1.0			
MMSZ5227B	Z3V6	3.6	3.42	3.78	20	24	1700	15	1.0			
MMSZ5228B	Z3V9	3.9	3.71	4.10	20	23	1900	10	1.0			
MMSZ5229B	Z4V3	4.3	4.09	4.52	20	22	2000	5.0	1.0			
MMSZ5230B	Z4V7	4.7	4.47	4.94	20	19	1900	5.0	2.0			
MMSZ5231B	Z5V1	5.1	4.85	5.36	20	17	1600	5.0	2.0			
MMSZ5232B	Z5V6	5.6	5.32	5.88	20	11	1600	5.0	3.0			
MMSZ5233B	Z6V0	6.0	5.70	6.30	20	7	16900	5.0	3.5			
MMSZ5234B	Z6V2	6.2	5.89	6.51	20	7	1000	5.0	4.0			
MMSZ5235B	Z6V8	6.8	6.46	7.14	20	5	750	3.0	5.0			
MMSZ5236B	Z7V5	7.5	7.13	7.88	20	6	500	3.0	6.0			
MMSZ5237B	Z8V2	8.2	7.79	8.61	20	8	500	3.0	6.5			
MMSZ5238B	Z8V7	8.7	8.27	9.14	20	8	600	3.0	6.5			
MMSZ5239B	Z9V1	9.1	8.65	9.56	20	10	600	3.0	7.0			
MMSZ5240B	Z10V	10	9.50	10.50	20	17	600	3.0	8.0			
MMSZ5241B	Z11V	11	10.45	11.55	20	22	600	2.0	8.4			
MMSZ5242B	Z12V	12	11.40	12.60	20	30	600	1.0	9.1			
MMSZ5243B	Z13V	13	12.35	13.65	9.5	13	600	0.5	9.9			
MMSZ5244B	Z14V	14	13.30	14.70	9.0	15	600	0.1	10.0			
MMSZ5245B	Z15V	15	14.25	15.75	8.5	16	600	0.1	11			
MMSZ5246B	Z16V	16	15.20	16.80	7.8	17	600	0.1	12			
MMSZ5247B	Z17V	16	1.04	17.85	7.4	19	600	0.1	13			
MMSZ5248B	Z18V	18	17.10	18.90	7.0	21	600	0.1	14			
MMSZ5249B	Z19V	19	18.05	19.95	6.6	23	600	0.1	14			
MMSZ5250B	Z20V	20	19.00	21.00	6.2	25	600	0.1	15			
MMSZ5251B	Z22V	22	20.90	23.10	5.6	29	600	0.1	17			
MMSZ5252B	Z24V	24	22.80	25.20	5.2	33	600	0.1	18			
MMSZ5253B	Z25V	25	23.75	26.25	5.0	35	600	0.1	19			

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ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Device (Note 1)	Device Marking Code	Zener Voltage Range (Note 2)				Maximum Zener Impedance		Maximum Reverse Leakage Current	
		V _Z @ I _{ZT}			I _{ZT}	Z _{KT} @ I _{ZK} = 0.25mA	Z _{KT} @ I _{ZT}	IR @ VR	
		Nom (V)	Min (V)	Max (V)				uA	
					mA	Ohms	Ohms		Volts
MMSZ5254B	Z27V	27	25.65	28.35	5.0	41	600	0.1	21
MMSZ5255B	Z28V	28	26.60	29.40	4.5	44	600	0.1	21
MMSZ5256B	Z30V	30	28.50	31.50	4.2	49	600	0.1	23
MMSZ5157B	Z33V	33	31.35	34.65	3.8	58	700	0.1	25
MMSZ5258B	Z36V	36	34.20	37.80	3.4	70	700	0.1	27
MMSZ5259B	Z39V	39	37.05	40.95	3.2	80	800	0.1	30
MMSZ5260B	Z43V	43	40.85	45.15	3.0	93	900	0.1	33
MMSZ5261B	Z47V	47	44.65	49.35	2.7	105	1000	0.1	36
MMSZ5262B	Z51V	51	48.45	53.55	2.5	125	1100	0.1	39
MMSZ5263B	Z56V	56	53.20	58.80	2.2	150	1300	0.1	43

V_F Forward Voltage=900mV Maximum @ I_F=10mA for all types

- Notes:
1. The zener voltage (V_Z) is tested under pulse conditon of 15mS. The measured V_Z is guaranteed to be within specification with device junction in thermal equilibrium.
 2. The device numbers listed have a standard tolerance on the nominal zener zener voltage of ±5%.
 3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having and ms value equal to 10% of the dc zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK}.
 4. For detailed information on price, availability and delivery of nominal zener voltages between the voltages shown and tighter voltage tolerances.

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